

REMARKS

Claims 1, 3 and 17-20 stand rejected under 35 USC 103(a) as being unpatentable over Nakagi in view of Chang, Koike, and Kim. This rejection is respectfully traversed.

As explained in the response filed on January 28, 2008, none of the cited references disclose or suggest the following combination of claimed features: 1) a color filter having a transmissive region and a reflective region which are provided in each picture element of the color filter and which have colored layers comprising a single material, 2) a three-peak type LED backlight source being used as the backlight source, and 3) an aperture that is formed in the reflective region. The combination of these elements as disclosed in the specification and as claimed produce a display that produces unexpectedly superior results when tested in comparison to displays in the prior art. These results would not have been expected from the references that show displays that utilizing only one or two of these elements. Since all of three of these elements are required to achieve these unexpected results and since none of the cited references disclose or suggest displays with this claimed combination, the claimed display would not be obvious in view of the cited art.

In the Advisory Action dated February 11, 2008, the Examiner states that "the arguments of the present invention having unexpected results over the prior art is not found persuasive since no actual evidence has been provided to support the unexpected results." Attached is the declaration of Dr. Yamashita, a named inventor of the instant application. Dr. Yamashita is extremely familiar with the present technology, and the skill in the art that existed at the time of the invention. As explained in detail by Dr. Yamashita, the claimed invention overcomes the problems associated with the different expression of the reflective and transmissive regions in a transfective display. This declaration provides specific evidence of the unexpected results achieved utilizing the claimed display.

As explained in the declaration, the problems associated with the different expression of the reflective and transmissive regions in a transfective display, were overcome by placing a small

aperture in the colored layer of the transmissive region of the display. This, however, creates another problem since the use of a small aperture decreases the darkness expression of the LCD in the reflective display mode. The inventors, however, found that the defect of a small aperture in the reflective display mode could be overcome by utilizing a 3-peak type LED that is used only in the transmissive display mode. More specifically, it was discovered that a 3-peak type LED backlight can be used to prevent the dark expression of the reflective display mode despite the use of the small aperture. This is counter intuitive and unexpected because the 3-peak type LED does not turn on in the reflective display mode. The inventors, however, found that 3-peak type LED can be used to decrease the thickness of the reflective layer in the transmissive display. When this layer is made thin using the three-peak type LED, the problem with darkness expression of the LCD in the reflective display mode is not encountered.

Accordingly, as explained by Dr. Yamashita, a display utilizing 1) a color filter having a transmissive region and a reflective region which are provided in each picture element of the color filter and which have colored layers comprising a single material, 2) a three-peak type LED backlight source being used as the backlight source, and 3) an aperture that is formed in the reflective region, was not known in the art and produces unexpected superior results, that would not be expected by the prior art displays. Since the prior art does not disclose or suggest the claimed display, the rejections of 1, 3 and 17-20, should be withdrawn.

Note that in the Advisory Action, the Examiner also stated that "[t]he arguments regarding to unexpected result of being able to obtain a transmissive liquid crystal display device having thinner color filter layers has structural limitations that are not commensurate with the scope of the claims." As described above, the use of the claimed 3-peak type LED is what decreases the thickness of the reflective layer in the transmissive display. Since the 3-peak type LED is claimed, applicants have included the relevant structural limitations.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. **360842011300**.

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Respectfully submitted,

By

Jonathan Bockman

Registration No.: 45,640
MORRISON & FOERSTER LLP
1650 Tysons Blvd, Suite 400
McLean, Virginia 22102
(703) 760-7769

Attachment